REMARKS

Claims 17-21 are in this application. Claims 1-16 were previously canceled. By the present amendment, claims 18-21 are canceled without prejudice or disclaimer. The specification and claim 17 are hereby amended, and new claims 22-40 are hereby added. Support for the amendments and new claims are found on page 11, lines 28-30, page 12, lines 7-12, page 17, lines 25-31, page 18, lines 1-9 and 23-24, page 21, lines 6-13, and page 22, lines 1-13. Accordingly, the amendments and new claims add no new matter.

In view of the above-described amendments and following remarks, reconsideration of claim 17, and consideration of new claims 22-40 are respectfully requested.

DRAWINGS

Applicants submit herewith a new Figure 1, showing the corrections in red ink. Support for the changes to Figure 1 is found in the original, informal drawings that were submitted with the parent application of the present case, namely U.S. Patent No. 09/568,225, filed on May 10, 2000. For the Patent Office's convenience, a copy of the informal drawing submitted with US Patent No. 09/568,225 is attached hereto. As they are fully supported by the original informal drawings, the amendments do not add new matter. Accordingly, applicants respectfully request entry of the present Figure 1.

Applicants are also submitting herewith a new formal figure 2. Original formal figure 2 contained typographical errors in the numbering of the nucleotides that appears at the beginning of each line of nucleotides in the drawing. As the error in numbering and the corrections are obvious, the amendments to new formal Figure 2 add no new matter. Accordingly, applicants respectfully request entry of the present Figure 2.

OBJECTIONS TO THE SPECIFICATION

The figure description beginning on line 22 of page 3 of the specification has been amended to indicate that the letters, W, S, and T refer to a transgenic mouse whose genome contains a wild-type transgene, or a transgene with a single mutation, or a transgene with a triple mutation, respectively. The specification has also been amended to indicate that the numerical

designations behind each of these letters refer to a particular founder animal and its progeny. Such animals can be homozygous for the transgene or heterozygous for the transgene. Each founder represents a different place in the genome where the DNA construct or transgene integrates. Scientists often make a few independent lines from each construct to verify that the effect caused by the construct (here movement disorder) is due to the gene inserted and not due to an artifact of where the transgene was integrated into the genome. For example, the founder animal may be a knock-out rather than a transgenic animal. Thus, W1 would represent one founder (or one of its progeny) whose genome contains the wild-type transgene, while W2 would represent another founder (or one of its progeny) whose genome also contains the wild-type transgene, but in a different location. As it is common practice in the art to identify transgenic animals in this manner, the amendments only make explicit what is implicit in the application, and thus do not add new matter.

NEW MATTER

As requested by the Patent Office, the description of Figure 2 has been amended to indicate that the sequence, namely SEQ ID NO. 3, shown in this Figure is the promoter of the murine α1B adrenergic receptor.

Applicants are also submitting herewith a paper copy and computer readable form of a corrected sequence listing for this application. The sequences in the paper copy and CRF are the same and are based on the sequences disclosed in the informal figures that were filed in the parent of the present divisional application. Thus, the sequence listing adds no new matter. The sequences in the present sequence listing and in the corrected figures are consistent and contain the same number of nucleotides and/or amino acids. More specifically, the nucleotide sequence shown in Figure 1 and SEQ ID NO. 1 both contain 2102 nucleotides. The amino acid sequence shown in Figure 1 and SEQ ID NO. 2 both contain 515 amino acids. Finally, the nucleotide sequence shown if Figure 2 and SEQ ID NO. 3 both contain 3453 nucleotides. Accordingly, applicants submit that the corrected figures and new sequence listing overcome the new matter rejection.

§112 REJECTIONS

Claims 17-21 are rejected under 35 USC § 112, first paragraph, "as failing to comply with the written description requirement." The Examiner objects to the fact that the application does not list all antagonists which "provide a receptor blockade of sufficient strength and specificity to lead to the desired treatment effect", and that "the claims are directed to the use of a subset of α_1 AR antagonists, for which little or no description is provided."

Claim 17 has been amended to recite that the claim is directed to treating a subject with a specific type of neurodegenerative disorder, namely a Parkinsonian type neurodegenerative disorder. Claim 17 has also been amended to recite a step of administering an α_{1B} adrenergic receptor antagonist to the subject. Applicant disagrees with the Section 112 rejections and notes that the Examiner has read a limitation of strength and selectivity into the claim that was not recited in original claim 17 (nor is it in claim 17 as amended.) Applicants have shown that terazosin, a compound which is known to function as an α_{1B} adrenergic receptor antagonist reduced some of the Parkinsonian-type symptoms in model transgenic animals exhibiting such symptoms. Despite their structural differences, all α_{1B} adrenergic receptor antagonists, including those recited in the specification, bind to and block activation of α_{1B} adrenergic receptors. Since all α_{1B} adrenergic receptor antagonists have the same biological effect, there is no reason to believe that other α_{1B} adrenergic receptor antagonists would not produce similar results. Accordingly, applicants submit that claim 17, as amended, complies with the written description of § 112. Claims 18-21 have been canceled, rendering the rejection of these claims moot.

Claims 17-21 are rejected under 35 USC § 112, first paragraph, "as failing to comply with the enablement requirement."

As explained above, Applicant has amended claim 17 to recite that the claim is directed to treating a subject with a Parkinsonian type neurodegenerative disorder. Claim 17 has also been amended to recite a step of administering a α_{1B} adrenergic receptor antagonist to the subject. In example 3 of the present application, applicants have shown that treatment of a model transgenic animal exhibiting Parkinsonian type symptoms and enzyme deficiencies with the α_{1B} adrenergic

receptor antagonist terazosin reduces these symptoms. In addition, applicants have provided a list of known α_{1B} adrenergic receptor antagonists, all of which are known in the art. Accordingly, applicants submit that claim 17, as amended, satisfies the enablement requirement of § 112. Claims 18-21 have been canceled, rendering the rejection of these claims moot.

Claims 17-21 are rejected under 35 USC § 112, first paragraph, "as being indefinite. Claims 18-21 have been canceled, rendering the rejection of these claims moot. Claim 17 has been amended to remove the phrases "capable of" and "biologically effective amount" from the claims. Claim 17 has also been amended to recite a step of administering an α_{1B} adrenergic receptor antagonist to the subject. By definition, an α_{1B} adrenergic receptor antagonist is a compound that binds to and blocks activation of an α_{1B} adrenergic receptor. Finally, claim 17 has been amended to recite that administration of the α_{1B} adrenergic receptor antagonist tempers the severity of the disease or the symptoms associated therewith. Applicants submit that claim 17 as amended meet the definiteness requirement of §112.

New Claim 36, which recites a method for treating a subject with neurodegenerative disorder that involves epileptic seizures, and new claim 39, which recites a method for treating a subject with a TH deficiency disorder, for the same reasons, meet all of the requirements of § 112. Dependent new claims 22-35 and 37, 38, and 40, because they depend from claims 17, 36, and 39 also meet all of the requirements of § 112.

In view of the amendments and remarks, applicants submit that amended claim 17 and new claims 22-40 are now in condition for allowance. Prompt notice of such allowance is respectfully requested.

Respectfully submitted,

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